

METHODS AND COMPOSITIONS FOR THE PRODUCTION,
IDENTIFICATION AND PURIFICATION OF FUSION PROTEINS

ABSTRACT OF THE DISCLOSURE

The present invention provides compositions and methods for producing fusion proteins that comprise an amino acid sequence tag. The amino acid sequence tag may be an amino acid sequence that is capable of being post-translationally modified; for example, the amino acid sequence may be an amino acid sequence that is capable of being biotinylated. The amino acid sequence tag may also be an amino acid sequence that is recognized by an antibody (or fragment thereof) or other specific interacting reagent. The invention includes isolated nucleic acid molecules comprising one or more nucleic acid sequences which encode an amino acid sequence tag. The nucleic acid molecules of the invention may also comprise one or more recombination sites and/or one or more topoisomerase recognition sites and/or one or more topoisomerases. The nucleic acid molecules of the invention can be used in recombinational cloning and/or topoisomerase-mediated cloning methods in order to produce polynucleotide constructs which encode fusion proteins that comprise an amino acid sequence tag. Also provided are host cells, kits and compositions comprising the nucleic acid molecules of the invention.